# CHAPTER 2.9.3.

## EUROPEAN FOULBROOD OF HONEY BEES

Article 2.9.3.1.

For the purposes of this chapter, European foulbrood is a disease of the larval and pupal stages of the honey bee *Apis mellifera* and other *Apis* spp., and occurs in most countries where such bees are kept. The causative agent is the non-sporulating bacterium *Melissococcus pluton*. Subclinical infections are common and require laboratory diagnosis. Infection remains enzootic because of mechanical contamination of the honeycombs. Recurrences of disease can therefore be expected in subsequent years.

For the purposes of this *Terrestrial Code*, the *incubation period* for European foulbrood shall be 15 days (not including the wintering period which may vary according to country).

Standards for diagnostic tests are described in the *Terrestrial Manual*.

Article 2.9.3.2.

The American foulbrood status of a country or zone/compartment can only be determined after considering the following criteria:

- 1) a risk assessment has been conducted, identifying all potential factors for American foulbrood occurrence and their historic perspective;
- 2) American foulbrood should be notifiable in the whole country or zone/compartment and all clinical signs suggestive of American foulbrood should be subjected to field and laboratory investigations;
- 3) an on-going awareness programme should be in place to encourage reporting of all cases suggestive of American foulbrood;
- 4) the *Veterinary Administration* or other competent authority with responsibility for the health of honey bees should have current knowledge of, and authority over, all apiaries in the whole country.

Article 2.9.3.3.

# Country or zone/compartment free from European foulbrood

## 1) Historically free status

A country or zone/compartment may be considered free from the disease after conducting a risk assessment as referred to in Article 2.9.3.2. but without formally applying a specific surveillance programme if the country or zone/compartment complies with the provisions of Article 3.8.1.2.

## 2) Free status as a result of an eradication programme

A country or zone/compartment which does not meet the conditions of point 1) above may be considered free from European foulbrood after conducting a risk assessment as referred to in Article 2.9.3.2. and when:

- a) the *Veterinary Administration* or other competent authority with responsibility for the health of honey bees has current knowledge of, and authority over, all domesticated apiaries existing in the country or zone/compartment;
- b) European foulbrood is notifiable in the whole country or zone/compartment, and any clinical cases suggestive of European foulbrood are subjected to field and laboratory investigations;
- c) for the 3 years following the last reported isolation of the European foulbrood agent, an annual survey supervised by the *Veterinary Administration*, with negative results, have been carried out on a representative sample of apiaries in the country or zone/compartment to provide a confidence level of at least 95% of detecting European foolbrood if at least 1% of the apiaries were infected at a within-apiary prevalence rate of at least 5% of the hives; such surveys may be targeted towards areas with the last reported isolation of the European foulbrood agent;
- d) to maintain free status, an annual survey supervised by the *Veterinary Administration*, with negative results, is carried out on a representative sample of hives in the country or zone/compartment to indicate that there has been no new isolations; such surveys may be targeted towards areas with a higher likelihood of isolation;
- e) there is no self-sustaining feral population of *A. mellifera* or other possible host species in the country or zone/compartment;
- f) the importation of the *commodities* listed in this Chapter into the country or zone/compartment is carried out in conformity with the recommendations of this Chapter.

Regardless of the European foulbrood status of the exporting country, *Veterinary Administrations* should authorise without restriction the import or transit through their territory of honey bee semen and honey bee venom.

*Veterinary Administrations* of *importing countries* should require:

for live queen honey bees, worker bees and drones with or without associated brood combs

the presentation of an *international veterinary certificate* attesting that the bees come from a country or zone/compartment free from European foulbrood.

*Veterinary Administrations* of *importing countries* should require:

for eggs, larvae and pupae of honey bees

the presentation of an *international veterinary certificate* attesting that the products:

- 1) were sourced from an free country or zone/compartment; or
- 2) have been isolated from queens in a *quarantine station*, and all workers which accompanied the queen or a representative sample of eggs or larvae were examined for the presence of

Melissococcus pluton by bacterial culture or PCR.

Article 2.9.3.7.

*Veterinary Administrations* of *importing countries* should require:

the presentation of an *international veterinary certificate* attesting that the equipment was sterilised under the supervision of the *Veterinary Authority* by either immersion in 0.5% sodium hypochlorite for at least 20 minutes (suitable only for non-porous materials such as plastic and metal), gamma irradiation using a cobalt-60 source at a dose rate of 10 kGy, or processing to ensure the destruction of *Melissococcus pluton*.

Article 2.9.3.8.

*Veterinary Administrations* of *importing countries* should require:

for honey, honey bee-collected pollen, beeswax, propolis and royal jelly

the presentation of an *international veterinary certificate* attesting that the products:

- 1) were collected in a country or zone/compartment free from European foulbrood; or
- 2) have been processed to ensure the destruction of *Melissococcus pluton*.